

CLAIM:

1. A citrus wedge cutting devise, and comprising:

a support base having vertical walls around the sides of an open space with a minimum of two and one-half inches between said walls to support manual operating pressure on a flat surface;

a housing assembly having a vertical through hole of two and one-half inch minimum diameter for moving citrus fruits through, being mounted on said support base;

a cover having an open space of two and one-half inch minimum diameter for moving citrus fruits through, being mounted on the top of said housing assembly; and

a drive plate having a press device above said cover and engaging to said housing assembly by gear-rack and guide rod devices to move vertically;

whereby, when said drive plate is moved down, said press device contacts the loaded citrus fruit and presses it through said housing assembly to be cut into wedges.

2. The citrus wedge cutting devise of Claim 1 wherein said housing assembly includes an outer housing holding a wedge knife assembled by multi-blades where each blade having a slot to combine one to another forms a wedge knife assembly, and a two-dimensional cam-and-follower device having a two-dimensional cam and a ball-end follower such that the ball part of said ball-end follower always contacts and is driven by said two-dimensional cam.

3. The citrus wedge cutting devise of Claim 2 wherein said two-dimensional cam having a center bore and a two-dimensional curve slot such that the curve slot path has various curvatures related to said center bore on either dimensions, and the width of said two-

dimensional curve slot is slightly larger than the size of said ball part in order to accommodate it.

4. The citrus wedge cutting devise of Claim 2 wherein said ball-end follower further has a solidly linked body with an extended knife on the opposite end, and a through hole on said body pivotally assembles said body on a slider that travels according to a linear guide.

5. The citrus wedge cutting devise of Claim 2 wherein said housing assembly further includes an inner housing assembly having a hole of two and one-half inch minimum diameter for moving citrus fruits through, being nested inside of said outer housing but above said wedge knife.

6. The citrus wedge cutting devise of Claim 5 wherein said inner housing assembly including an auto-center device having at least three adjustable units distributed around said hole, and each said adjustable unit having shaft and tube mating parts uses spring force to adjust the alignment of the center of a loaded citrus fruit automatically with the cutting center of said citrus wedge cutting devise of Claim 1 before the cutting action;

7. The citrus wedge cutting devise of Claim 1 further includes a manually operated handle assembled on said machine body to transfer man power through said gear-rack device to control the movement of said drive plate.